

# ATULAYA HEALTHCARE PRIVATE LIMITED

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Patient NAME : Mr.BHARAT SAINI Age/Gender : 32 Y 5 M 7 D /M UAID/Oth.Lab Ref. : AC42.0000025813/

SIN No. : ACB89094 Sample Collection Time : 21/Jan/2022 12:33PM Sample Received in Lab Time: 21/Jan/2022 12:42PM Reported Time : 21/Jan/2022 04:35PM

Ref. Doctor : Dr.SELF

| DEPARTMENT OF MOLECULAR BIOLOGY |  |      | IN/OUT SAMPLE :InHouse Sample |        |
|---------------------------------|--|------|-------------------------------|--------|
| Test Name                       | Result                                 | Unit | Bio. Ref. Range               | Method |
| *Kit used                       | Meril COVID-19 One-<br>step RT-PCR kit |      |                               |        |
| SARS-CoV-2 RT PCR               | Positive                               |      | Negative                      | RT-PCR |
| Ct value of ORF 1ab gene        | 25.81                                  | NA   | -                             |        |
| Ct value of N gene              | 26.69                                  | NA   | -                             |        |

#### Comment:

ICMR Registration No.: AUHCPLP

Sample type: Nasopharyngeal & Oropharyngeal Swab

| Result   | Remarks                                 |  |  |
|----------|---|--|--|
| Positive | RNA specific to SARS-CoV-2 Detected     |  |  |
| Negative | RNA specific to SARS-CoV-2 Not Detected |  |  |

Note: The Ct value is inversely proportional to the amount of genetic material (RNA) in the starting sample and can differ with the type of kit, sample collection, transport conditions etc.

Real Time Reverse Transcription Polymerase Chain Reaction (RT PCR) test for the detection of RNA form SARS CoV2 in human nasopharyngeal and oropharyngeal swab specimens

## Clinical significance

SARS COV 2 is the causative agent for corona virus disease 2019 or COVID-19 in Humans. SARS COV 2 is a Beta Corona Virus, one of the four genera of Corona Viruses. Coronaviruses are enveloped non-segmented positive sense RNA viruses belonging to the family coronaviridae and the order Nidovirales and broadly distributed in humans and other mammals. The common signs of COVID-19 infection include respiratory symptoms, fever, cough, shortness of breath and breathing difficulties. In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome, kidney failure and even death. Early and correct identification of infection with SARS CoV 2 is important for effective isolation, treatment and case management of COVID-19.

### Target Selection

The larget sequence is N and ORF 1ab gene of SARS CoV2 when using Meril Covid19 kit and Innodetect one step COVID-19 kit. E gene, N gene and RdRp gene when using Hi PCR coronavirus multiplex Probe PCR kit. Limitations

- 1. This kit is a qualitative kit that does not provide a quantitative value for the detected pathogens in the specimen.

- 2. Positive results indicate infection but the possibility of infection with other similar viruses cannot be ruled out.
  3. Negative result does not rule out COVID-19 infection. It should be interpretated along with the history, clinical findings and other epidemiological factors.
  4. A not detected result means that SARS-CoV\_2 RNA was not present in the specimen above the limit of detection. However, improper sample collection, handling, storage and transportation may result in false negative result. The report represents only the specimen received in the laboratory.

  5. Negative results do not rule out possibly of SARS-CoV-2 infection and should not be used as the sole basis for patient management decisions. Presence of inhibitors, mutations and insufficient organism RNA can influence the result.
- 6. Positive result does not distinguish between viable and non-viable virus.
- Viral load may differ at the beginning and towards the end of infection in an individual, thus repeat testing done on different days may show different results. 8. Various ICMR approved kits may have differences in test sensitivity, specificity and cut off values for PCR cycles, thus may result in difference of results.

# Note: Test is performed using ICMR approved kit.

# References:

\* The Institut Pasteur website:

https://www.pasteur.fr/en/medical-center/disease-sheets/covid-19-disease-novel- coronavirus#symptoms. Accessed March 2020.

- \* Center for Disease Control (CDC) website: https://www.cdc.gov/urdo/downloads/SpecCollectionGuidelines.pdf. Accessed March 2020.

  \* CDC Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Patients Under Investigation (PUIs) for 2019 Novel Coronavirus. https://www.cdc.gov/coronavirus/2019-nCoV/guidelines-clinical-specimens.html.
- \* World Health Organization (WHO). Laboratory testing for coronavirus disease 2019 (COVID-19) in suspected human cases: Interim guidance, 2 March 2020. \*ICMR:https://www.icmr.gov.in/pdf/covid/techdoc/Advisory\_on\_correlation\_of\_COVID\_severity\_with\_Ct\_values.pdf

\*\*\* End Of Report \*\*\*

Dr.Shivani Garg (MD Microbiology) Consultant Microbiologist

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Report Authentication QR Code



Sample Collected At

ATULAYA HEALTHCARE COVID COLLECTI New Lake Parking, Sector 42 Chandigarh

Sample Processed At ATULAYA HEALTHCARE (MAIN REFERENCE LAB)

Plot No 6, Sector 82 JLPL SAS Nagar

Only for Clinical Lab Report Home Sample Collection - 9779 599 499